



## Performance Data Sheet

### TPG1410YXA

#### General Information

|                |                          |                          |             |
|----------------|--------------------------|--------------------------|-------------|
| Model          | TPG1410YXA               | Refrigerant              | R-134a      |
| Test Condition | ASHRAE                   | Performance Test Voltage | 115V ~ 60HZ |
| Return Gas     | 32.2°C (90°F) RETURN GAS | Motor Type               | PTCS_CR     |

#### Performance Information

| Evap<br>Temp (°C) | Condensing Temperature (°C) |      |      |      |      |
|-------------------|-----------------------------|------|------|------|------|
|                   |                             | 30   | 40   | 50   | 60   |
| -40               | Btu/h                       | 377  | 304  | 218  | 129  |
|                   | Watts (Power)               | 104  | 101  | 96.1 | 86.1 |
|                   | Amps                        | 0.96 | 0.93 | 0.89 | 0.85 |
|                   | Lb/h                        | 3.76 | 2.76 | 1.62 | 0.47 |
| -35               | Btu/h                       | 696  | 610  | 504  | 389  |
|                   | Watts (Power)               | 133  | 130  | 126  | 117  |
|                   | Amps                        | 1.20 | 1.18 | 1.14 | 1.09 |
|                   | Lb/h                        | 7.69 | 6.59 | 5.22 | 3.72 |
| -30               | Btu/h                       | 989  | 898  | 780  | 644  |
|                   | Watts (Power)               | 156  | 157  | 155  | 148  |
|                   | Amps                        | 1.40 | 1.40 | 1.39 | 1.34 |
|                   | Lb/h                        | 11.4 | 10.2 | 8.73 | 6.98 |
| -25               | Btu/h                       | 1290 | 1200 | 1070 | 927  |
|                   | Watts (Power)               | 175  | 181  | 184  | 181  |
|                   | Amps                        | 1.56 | 1.61 | 1.63 | 1.62 |
|                   | Lb/h                        | 15.1 | 14.1 | 12.5 | 10.6 |
| -23.3             | Btu/h                       | 1400 | 1310 | 1190 | 1030 |
|                   | Watts (Power)               | 180  | 189  | 194  | 192  |
|                   | Amps                        | 1.61 | 1.68 | 1.72 | 1.72 |
|                   | Lb/h                        | 16.5 | 15.5 | 14.0 | 12.0 |
| -20               | Btu/h                       | 1620 | 1540 | 1420 | 1270 |
|                   | Watts (Power)               | 191  | 203  | 213  | 216  |
|                   | Amps                        | 1.69 | 1.81 | 1.89 | 1.93 |
|                   | Lb/h                        | 19.4 | 18.5 | 17.0 | 15.1 |
| -15               | Btu/h                       | 2020 | 1960 | 1850 | 1700 |
|                   | Watts (Power)               | 204  | 226  | 244  | 254  |
|                   | Amps                        | 1.80 | 2.02 | 2.18 | 2.28 |
|                   | Lb/h                        | 24.5 | 23.9 | 22.6 | 20.6 |
| -10               | Btu/h                       | 2520 | 2480 | 2380 | 2240 |
|                   | Watts (Power)               | 216  | 248  | 277  | 297  |
|                   | Amps                        | 1.91 | 2.23 | 2.50 | 2.69 |
|                   | Lb/h                        | 30.9 | 30.6 | 29.5 | 27.7 |

| COEFFICIENTS | CAPACITY      | POWER         | CURRENT       | MASS FLOW     |
|--------------|---------------|---------------|---------------|---------------|
| C1           | 3.312760E+03  | 6.799749E+01  | -9.255481E-02 | 3.875896E+01  |
| C2           | 1.396746E+02  | -7.244386E+00 | -8.266223E-02 | 1.711104E+00  |
| C3           | 3.502358E+01  | 4.830481E+00  | 8.319654E-02  | 5.551702E-01  |
| C4           | 3.304745E+00  | -8.719371E-02 | -8.015241E-04 | 4.118254E-02  |
| C5           | 1.340589E+00  | 3.364310E-01  | 3.891480E-03  | 1.991931E-02  |
| C6           | -5.443724E-01 | 4.727389E-02  | -2.636242E-04 | -8.094673E-03 |
| C7           | 4.045583E-02  | 1.197428E-03  | 1.331879E-05  | 4.949791E-04  |
| C8           | 1.459013E-02  | 3.746973E-03  | 4.135832E-05  | 1.863890E-04  |
| C9           | -7.130979E-03 | -4.282845E-04 | -9.228348E-06 | -1.170528E-04 |
| C10          | 1.635645E-03  | -5.996536E-04 | -1.092074E-06 | 2.237479E-05  |

$$\text{Value} = C1 + C2 * Te + C4 * Te^2 + C7 * Te^3 + (C3 + C5 * Te + C8 * Te^2) * Tc + (C6 + C9 * Te) * Tc^2 + C10 * Tc^3$$

Te = Evaporator Temperature

Tc = Condensing Temperature